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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/629,019

07/28/2003

R. William Ezell

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EXAMINER

NGUYEN, KHAI M

ART UNIT

PAPER NUMBER

2819

DATE MAILED: 12/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,019

Applicant(s)

EZELL, R. WILLIAM

Examiner

Khai M. Nguyen

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-32 is/are allowed.
- 6) ☒ Claim(s) 1-3, 13-16, 26 and 33 is/are rejected.
- 7) ☒ Claim(s) 4-12 and 17-25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to the rejected claims 1 & 14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claim 15 is objected. This claim is unclear because of the phrase "repeat the steps..." which steps does the applicant mean? Clarification or correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 13-16, 26, and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamamoto et al. (US 4,841,461) (hereinafter, Yamamoto).

Regarding claim 1, Yamamoto discloses a method (Fig. 1) for storing a result of a tuning process, comprising:

(a) generating a first characteristic signal (having amplitude signal characteristic provided to the non-inverting input terminal of comparator 6 - column 3, lines 45-47);

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(b) generating a second characteristic signal (the signal V_{ref} having FM signal characteristic provided to the inverting input terminal of comparator 6) in response at least in part to a current signal (from current source(s) – see column 3, lines 10-13);

(c) determining an adjustment to the current signal (column 3, lines 10-13) based at least in part upon the first and second characteristic signals; and

(d) storing, in a memory (13 and/or 24), a digital value representing the adjustment (column 4, lines 5-17).

Regarding claim 2, Yamamoto discloses the process of claim 1 is repeated by the apparatus of Fig. 1, and further including a step of updating the digital value (the adjustment data) after each iteration (column 4, lines 16-26).

Regarding claim 3, Yamamoto discloses the method of claim 2 comprising a plurality of bits (i.e., adjustment data), and a memory (24) for storing the result of each iteration (adjustment) in a bit of the digital value.

Regarding claim 13, Yamamoto discloses the method of claim 1 comprising tuning (Yamamoto uses the term “adjustment”) a filter (2) using the stored digital value (in the memory 24).

Regarding claim 14, Yamamoto discloses a tuning circuit (Fig. 1), comprising:

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a signal generator (5) operable to generate a first characteristic signal (having amplitude signal characteristic provided to the non-inverting input terminal of comparator 6 - column 3, lines 45-47);

a master circuit (including 2 & 7) operable to receive a current signal (from the controllable current source(s) – column 3, lines 10-14) and to generate a second characteristic signal (the signal V_{ref} having FM signal characteristic provided to the inverting input terminal of comparator 6) in response to the current signal;

a controller (CPU 21) operable to determine an adjustment (the adjustment data) to the current signal based at least in part upon the first and second characteristic signals; and

a memory (24) operable to store a digital value representing the adjustment (column 4, lines 16-26).

Regarding claims 15-16, these claim are rejected in the same manner with claims 2-3 above, respectively.

Regarding claim 26, Yamamoto discloses the method of claim 1 comprising tuning (Yamamoto uses the term “adjustment”) a filter (2) using the stored digital value (in the memory 24).

Regarding claim 26, Yamamoto discloses the circuit of claim 14 comprising a filter (2) that is tuned (adjusted) using the stored digital value.

Regarding claim 33, Yamamoto discloses a system (Fig. 1), comprising:

means (5) for generating a first characteristic signal (having amplitude signal characteristic provided to the non-inverting input terminal of comparator 6 - column 3, lines 45-47);

means (7) for generating a second characteristic signal (the signal Vref having FM signal characteristic provided to the inverting input terminal of comparator 6) in response to a current signal (from current source(s) – see column 3, lines 10-13) ;

means (including 6, 14 & 24) for determining an adjustment to the current signal (of the current sources – column 3, lines 10-13) based at least in part upon the first and second characteristic signals; and

means (24) for storing a digital value (adjustment data) representing the adjustment.

Allowable Subject Matter

4. Claims 4-12, and 17-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 27-32 are allowed.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M. Nguyen whose telephone number is 571-272-1809. The examiner can normally be reached on 9:00 - 5:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford (Rex) Barnie can be reached on 571-272-7492. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Khai M. Nguyen
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571-272-1809

SPE Rexford Barnie